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LENOVO® THINKSERVER®
OPTIONS AND UPGRADES

Enhance your server solutions.

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Lenovo ThinkServer:
Think Enterprise. Think Flexible. Think Ahead.

For growing small businesses to enterprise workloads, ThinkServer not only has what you need, but it fits in your environment to meet your business-critical demands, while maximizing your budget.

GET MORE OUT OF YOUR THINKSERVER SYSTEMS

As your business needs grow, you need IT that can grow with you — without straining your budget or increasing complexity. Cost-effective ThinkServer options give you added performance and functionality and are easy to install and configure so you can be up and running quickly and stay that way. Why should you buy ThinkServer-branded options?

- **Compatibility** – ThinkServer options and upgrades are thoroughly tested for compatibility for easy integration into your system. We don't mean just plugging the option in and powering on the system. We test ThinkServer options in multiple configurations to make sure we have full compatibility across the line.
- **Reliability** – Because reliability is key, we strive for flawless implementation so your server starts quickly and stays up and running. At Lenovo, we have high expectations from our suppliers. All ThinkServer options must meet stringent quality standards for reliability in enterprise environments. We source the best materials available and ensure they are living up to Lenovo standards.
- **Serviceability** – ThinkServer options inherit the base system warranty of the server to which they are installed – including 4-hour service upgrades. If your server is critical enough to your business to upgrade the warranty, the only way to ensure that availability is to choose ThinkServer options.
- **Optimization** – We turn the results from our rigorous quality testing into action and optimize many options to deliver the best ThinkServer performance possible.

BOOST YOUR PERFORMANCE

Processors and Memory

When you want to increase ThinkServer performance for database processing, virtualization and line-of-business applications among others, consider adding a second processor or expanding memory. ThinkServer tower servers are powered by the latest-generation Intel® Xeon® processor technology, providing world-class performance and compute power. Lenovo-branded, low-voltage memory offers higher performance and more bandwidth over previous-generation technology, while reducing power consumption.

Part Number	Processor	RD540 /RD640	RD340 /RD440	TD340	TD350	RD550	RD650
0C19546	Intel Xeon E5-2697 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19547	Intel Xeon E5-2695 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19548	Intel Xeon E5-2690 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19549	Intel Xeon E5-2680 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19550	Intel Xeon E5-2670 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19551	Intel Xeon E5-2660 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19552	Intel Xeon E5-2650L v2 Processor Option for ThinkServer RD540/RD640	*					
0C19553	Intel Xeon E5-2667 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19554	Intel Xeon E5-2650 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19555	Intel Xeon E5-2640 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19556	Intel Xeon E5-2630 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19557	Intel Xeon E5-2620 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19558	Intel Xeon E5-2630L v2 Processor Option for ThinkServer RD540/RD640	*					
0C19559	Intel Xeon E5-2609 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19560	Intel Xeon E5-2603 v2 Processor Option for ThinkServer RD540/RD640	*					
0C19537	Intel Xeon E5-2470 v2 Processor Option for ThinkServer RD340/RD440		*				
0C19538	Intel Xeon E5-2450 v2 Processor Option for ThinkServer RD340/RD440		*				
0C19539	Intel Xeon E5-2440 v2 Processor Option for ThinkServer RD340/RD440		*				
0C19540	Intel Xeon E5-2430 v2 Processor Option for ThinkServer RD340/RD440		*				
0C19541	Intel Xeon E5-2420 v2 Processor Option for ThinkServer RD340/RD440		*				
0C19542	Intel Xeon E5-2407 v2 Processor Option for ThinkServer RD340/RD440		*				
0C19543	Intel Xeon E5-2403 v2 Processor Option for ThinkServer RD340/RD440		*				

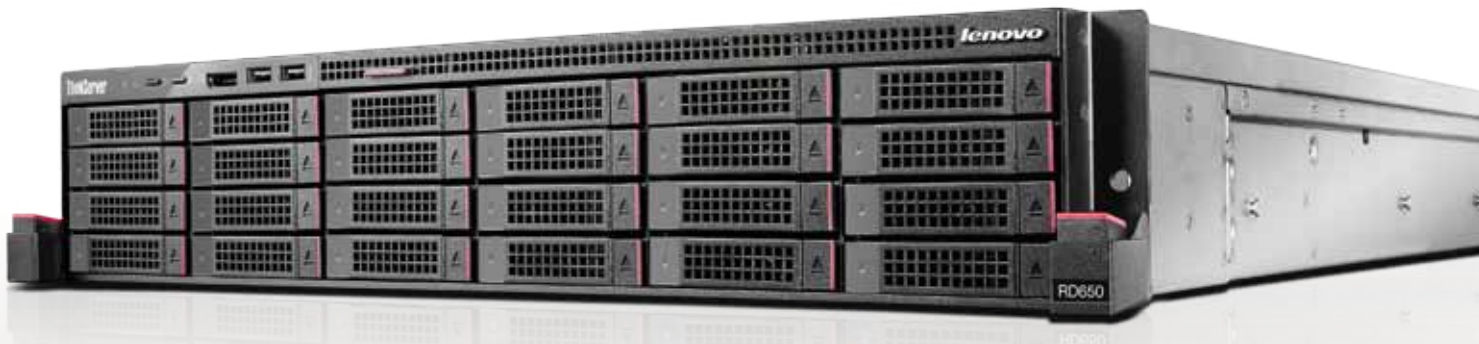
Part Number	Processor	RD540 /RD640	RD340 /RD440	TD340	TD350	RD550	RD650
0C19544	Intel Xeon E5-2450L v2 Processor Option for ThinkServer RD340/RD440		*				
0C19545	Intel Xeon E5-2430L v2 Processor Option for ThinkServer RD340/RD440		*				
0C19561	Intel Xeon E5-2470 v2 Processor Option for ThinkServer TD340			*			
0C19562	Intel Xeon E5-2450 v2 Processor Option for ThinkServer TD340			*			
0C19563	Intel Xeon E5-2440 v2 Processor Option for ThinkServer TD340			*			
0C19564	Intel Xeon E5-2430 v2 Processor Option for ThinkServer TD340			*			
0C19565	Intel Xeon E5-2420 v2 Processor Option for ThinkServer TD340			*			
0C19566	Intel Xeon E5-2407 v2 Processor Option for ThinkServer TD340			*			
0C19567	Intel Xeon E5-2403 v2 Processor Option for ThinkServer TD340			*			
0C19568	Intel Xeon E5-2450L v2 Processor Option for ThinkServer TD340			*			
0C19569	Intel Xeon E5-2430L v2 Processor Option for ThinkServer TD340			*			
4XG0F28775	Lenovo ThinkServer TD350 Intel Xeon E5-2698 v3 (16C, 135W, 2.3 GHz) Processor Option Kit				*		
4XG0F28776	Lenovo ThinkServer TD350 Intel Xeon E5-2695 v3 (14C, 120W, 2.3 GHz) Processor Option Kit				*		
4XG0F28777	Lenovo ThinkServer TD350 Intel Xeon E5-2690 v3 (12C, 135W, 2.6 GHz) Processor Option Kit				*		
4XG0F28778	Lenovo ThinkServer TD350 Intel Xeon E5-2683 v3 (14C, 120W, 2.0 GHz) Processor Option Kit				*		
4XG0F28779	Lenovo ThinkServer TD350 Intel Xeon E5-2680 v3 (12C, 120W, 2.5 GHz) Processor Option Kit				*		
4XG0F28780	Lenovo ThinkServer TD350 Intel Xeon E5-2670 v3 (12C, 120W, 2.3 GHz) Processor Option Kit				*		
4XG0F28781	Lenovo ThinkServer TD350 Intel Xeon E5-2660 v3 (10C, 105W, 2.6 GHz) Processor Option Kit				*		
4XG0F28782	Lenovo ThinkServer TD350 Intel Xeon E5-2650 v3 (10C, 105W, 2.3 GHz) Processor Option Kit				*		

Part Number	Processor	RD540 /RD640	RD340 /RD440	TD340	TD350	RD550	RD650
4XG0F28783	Lenovo ThinkServer TD350 Intel Xeon E5-2640 v3 (8C, 90W, 2.6 GHz) Processor Option Kit				*		
4XG0F28784	Lenovo ThinkServer TD350 Intel Xeon E5-2630 v3 (8C, 85W, 2.4 GHz) Processor Option Kit				*		
4XG0F28785	Lenovo ThinkServer TD350 Intel Xeon E5-2620 v3 (6C, 85W, 2.4 GHz) Processor Option Kit				*		
4XG0F28786	Lenovo ThinkServer TD350 Intel Xeon E5-2609 v3 (6C, 85W, 1.9 GHz) Processor Option Kit				*		
4XG0F28787	Lenovo ThinkServer TD350 Intel Xeon E5-2603 v3 (6C, 85W, 1.6 GHz) Processor Option Kit				*		
4XG0F28788	Lenovo ThinkServer TD350 Intel Xeon E5-2650L v3 (12C, 65W, 1.8 GHz) Processor Option Kit				*		
4XG0F28789	Lenovo ThinkServer TD350 Intel Xeon E5-2630L v3 (8C, 55W, 1.8 GHz) Processor Option Kit				*		
4XG0F28790	Lenovo ThinkServer RD550 Intel Xeon E5-2699 v3 (18C, 145W, 2.3 GHz) Processor Option Kit					*	
4XG0F28791	Lenovo ThinkServer RD550 Intel Xeon E5-2698 v3 (16C, 135W, 2.3 GHz) Processor Option Kit					*	
4XG0F28792	Lenovo ThinkServer RD550 Intel Xeon E5-2697 v3 (14C, 145W, 2.6 GHz) Processor Option Kit					*	
4XG0F28793	Lenovo ThinkServer RD550 Intel Xeon E5-2695 v3 (14C, 120W, 2.3 GHz) Processor Option Kit					*	
4XG0F28794	Lenovo ThinkServer RD550 Intel Xeon E5-2690 v3 (12C, 135W, 2.6 GHz) Processor Option Kit					*	
4XG0F28795	Lenovo ThinkServer RD550 Intel Xeon E5-2683 v3 (14C, 120W, 2.0 GHz) Processor Option Kit					*	
4XG0F28796	Lenovo ThinkServer RD550 Intel Xeon E5-2680 v3 (12C, 120W, 2.5 GHz) Processor Option Kit					*	
4XG0F28797	Lenovo ThinkServer RD550 Intel Xeon E5-2670 v3 (12C, 120W, 2.3 GHz) Processor Option Kit					*	
4XG0F28798	Lenovo ThinkServer RD550 Intel Xeon E5-2660 v3 (10C, 105W, 2.6 GHz) Processor Option Kit					*	
4XG0F28799	Lenovo ThinkServer RD550 Intel Xeon E5-2650 v3 (10C, 105W, 2.3 GHz) Processor Option Kit					*	
4XG0F28800	Lenovo ThinkServer RD550 Intel Xeon E5-2640 v3 (8C, 90W, 2.6 GHz) Processor Option Kit					*	
4XG0F28801	Lenovo ThinkServer RD550 Intel Xeon E5-2630 v3 (8C, 85W, 2.4 GHz) Processor Option Kit					*	

Part Number	Processor	RD540 /RD640	RD340 /RD440	TD340	TD350	RD550	RD650
4XG0F28802	Lenovo ThinkServer RD550 Intel Xeon E5-2620 v3 (6C, 85W, 2.4 GHz) Processor Option Kit					*	
4XG0F28803	Lenovo ThinkServer RD550 Intel Xeon E5-2609 v3 (6C, 85W, 1.9 GHz) Processor Option Kit					*	
4XG0F28804	Lenovo ThinkServer RD550 Intel Xeon E5-2603 v3 (6C, 85W, 1.6 GHz) Processor Option Kit					*	
4XG0F28805	Lenovo ThinkServer RD550 Intel Xeon E5-2650L v3 (12C, 65W, 1.8 GHz) Processor Option Kit					*	
4XG0F28806	Lenovo ThinkServer RD550 Intel Xeon E5-2630L v3 (8C, 55W, 1.8 GHz) Processor Option Kit					*	
4XG0F28807	Lenovo ThinkServer RD650 Intel Xeon E5-2699 v3 (18C, 145W, 2.3 GHz) Processor Option Kit						*
4XG0F28808	Lenovo ThinkServer RD650 Intel Xeon E5-2698 v3 (16C, 135W, 2.3 GHz) Processor Option Kit						*
4XG0F28809	Lenovo ThinkServer RD650 Intel Xeon E5-2697 v3 (14C, 145W, 2.6 GHz) Processor Option Kit						*
4XG0F28810	Lenovo ThinkServer RD650 Intel Xeon E5-2695 v3 (14C, 120W, 2.3 GHz) Processor Option Kit						*
4XG0F28811	Lenovo ThinkServer RD650 Intel Xeon E5-2690 v3 (12C, 135W, 2.6 GHz) Processor Option Kit						*
4XG0F28812	Lenovo ThinkServer RD650 Intel Xeon E5-2683 v3 (14C, 120W, 2.0 GHz) Processor Option Kit						*
4XG0F28813	Lenovo ThinkServer RD650 Intel Xeon E5-2680 v3 (12C, 120W, 2.5 GHz) Processor Option Kit						*
4XG0F28814	Lenovo ThinkServer RD650 Intel Xeon E5-2670 v3 (12C, 120W, 2.3 GHz) Processor Option Kit						*
4XG0F28815	Lenovo ThinkServer RD650 Intel Xeon E5-2660 v3 (10C, 105W, 2.6 GHz) Processor Option Kit						*
4XG0F28816	Lenovo ThinkServer RD650 Intel Xeon E5-2650 v3 (10C, 105W, 2.3 GHz) Processor Option Kit						*
4XG0F28817	Lenovo ThinkServer RD650 Intel Xeon E5-2640 v3 (8C, 90W, 2.6 GHz) Processor Option Kit						*
4XG0F28818	Lenovo ThinkServer RD650 Intel Xeon E5-2630 v3 (8C, 85W, 2.4 GHz) Processor Option Kit						*
4XG0F28819	Lenovo ThinkServer RD650 Intel Xeon E5-2620 v3 (6C, 85W, 2.4 GHz) Processor Option Kit						*
4XG0F28820	Lenovo ThinkServer RD650 Intel Xeon E5-2609 v3 (6C, 85W, 1.9 GHz) Processor Option Kit						*

Part Number	Processor	RD540 /RD640	RD340 /RD440	TD340	TD350	RD550	RD650
4XG0F28821	Lenovo ThinkServer RD650 Intel Xeon E5-2603 v3 (6C, 85W, 1.6 GHz) Processor Option Kit						*
4XG0F28822	Lenovo ThinkServer RD650 Intel Xeon E5-2650L v3 (12C, 65W, 1.8 GHz) Processor Option Kit						*
4XG0F28823	Lenovo ThinkServer RD650 Intel Xeon E5-2630L v3 (8C, 55W, 1.8 GHz) Processor Option Kit						*
4XG0F28824	Lenovo ThinkServer TD350 Intel Xeon E5-2667 v3 (8C, 135W, 3.2 GHz) Processor Option Kit				*		
4XG0F28825	Lenovo ThinkServer TD350 Intel Xeon E5-2643 v3 (6C, 135W, 3.4 GHz) Processor Option Kit				*		
4XG0F28826	Lenovo ThinkServer TD350 Intel Xeon E5-2637 v3 (4C, 135W, 3.5 GHz) Processor Option Kit				*		
4XG0F28827	Lenovo ThinkServer TD350 Intel Xeon E5-2623 v3 (4C, 105W, 3.0 GHz) Processor Option Kit				*		
4XG0F28828	Lenovo ThinkServer TD350 Intel Xeon E5-2685 v3 (12C, 120W, 2.6 GHz) Processor Option Kit				*		
4XG0F28829	Lenovo ThinkServer RD550 Intel Xeon E5-2667 v3 (8C, 135W, 3.2 GHz) Processor Option Kit					*	
4XG0F28830	Lenovo ThinkServer RD550 Intel Xeon E5-2643 v3 (6C, 135W, 3.4 GHz) Processor Option Kit					*	
4XG0F28831	Lenovo ThinkServer RD550 Intel Xeon E5-2637 v3 (4C, 135W, 3.5 GHz) Processor Option Kit					*	
4XG0F28832	Lenovo ThinkServer RD550 Intel Xeon E5-2623 v3 (4C, 105W, 3.0 GHz) Processor Option Kit					*	
4XG0F28833	Lenovo ThinkServer RD550 Intel Xeon E5-2685 v3 (12C, 120W, 2.6 GHz) Processor Option Kit					*	
4XG0F28834	Lenovo ThinkServer RD650 Intel Xeon E5-2667 v3 (8C, 135W, 3.2 GHz) Processor Option Kit						*
4XG0F28835	Lenovo ThinkServer RD650 Intel Xeon E5-2643 v3 (6C, 135W, 3.4 GHz) Processor Option Kit						*
4XG0F28836	Lenovo ThinkServer RD650 Intel Xeon E5-2637 v3 (4C, 135W, 3.5 GHz) Processor Option Kit						*
4XG0F28837	Lenovo ThinkServer RD650 Intel Xeon E5-2623 v3 (4C, 105W, 3.0 GHz) Processor Option Kit						*
4XG0F28838	Lenovo ThinkServer RD650 Intel Xeon E5-2685 v3 (12C, 120W, 2.6 GHz) Processor Option Kit						*

Part Number	Memory	RD540/ RD640	RD340/ RD440	RS140	TD340	TS440/ TS140	TD350	RD550/ RD650
0C19498	ThinkServer 2GB DDR3L-1600 MHz (1Rx8) ECC UDIMM			*	*	*		
0C19499	ThinkServer 4GB DDR3L-1600 MHz (1Rx8) ECC UDIMM			*	*	*		
0C19500	ThinkServer 8GB DDR3L-1600 MHz (2Rx8) ECC UDIMM			*		*		
0C19533	ThinkServer 4GB DDR3L-1600 MHz (1Rx8) RDIMM	*	*		*			
0C19534	ThinkServer 8GB DDR3L-1600 MHz (2Rx8) RDIMM	*	*		*			
0C19535	ThinkServer 16GB DDR3L-1600 MHz (2Rx4) RDIMM	*	*		*			
4X70F28585	ThinkServer 4GB DDR3-1866 MHz (1Rx8) RDIMM	*	*		*			
4X70F28586	ThinkServer 8GB DDR3-1866 MHz (1Rx4) RDIMM	*	*		*			
4X70F28587	ThinkServer 16GB DDR3-1866 MHz (2Rx4) RDIMM	*	*		*			
4X70F28588	Lenovo ThinkServer 4GB DDR4-2133 MHz (1Rx8) RDIMM						*	*
4X70F28589	Lenovo ThinkServer 8GB DDR4-2133 MHz (1Rx4) RDIMM						*	*
4X70F28590	Lenovo ThinkServer 16GB DDR4-2133 MHz (2Rx4) RDIMM						*	*
4X70F28591	Lenovo ThinkServer 32GB DDR4-2133 MHz (4Rx4) LRDIMM						*	*



STEP UP YOUR INTERNAL STORAGE

Hard-disk Drives and Solid-state Drives

Your data is likely your most important asset. For storage, you need no-compromises performance and high reliability. For ThinkServer, Lenovo offers a choice of the industry's most trusted SATA or SAS hard-disk drives as well as blazing-fast solid-state drives in various capacities that are tested for durability. Easy to install, ThinkServer drives are designed with ergonomic cradles that also make maintenance a snap. No matter your business needs, ThinkServer storage options deliver the performance, reliability and capacity you demand. Wondering which drive type you should use? Consider this.

- SATA hard-disk drives offer an unbeatable combination of high scalability and budget-friendly prices.
- SAS hard-disk drives are typically only used in servers. They have better error-correcting capabilities than SATA hard-disk drives and are generally faster.
- Solid-state drives contain no moving parts making them more reliable than SATA or SAS hard-disk drives and much faster. Choose solid-state drives when the absolute highest performance and reliability are non-negotiable.

Part Number	Drive	RD540 /RD640	RD340 /RD440	RS140	TD340 /TD440	TS440	TS140	TD350	RD550 /RD650
3.5" Hard-disk drives									
4XB0F28664	ThinkServer 3.5" 500GB 7.2K Enterprise SATA 6Gbps Hard Drive for RS Series			*					
4XB0F28665	ThinkServer 3.5" 1TB 7.2K Enterprise SATA 6Gbps Hard Drive for RS Series			*					
4XB0F28666	ThinkServer 3.5" 2TB 7.2K Enterprise SATA 6Gbps Hard Drive for RS Series			*					
4XB0F28667	ThinkServer 3.5" 3TB 7.2K Enterprise SATA 6Gbps Hard Drive for RS Series			*					
4XB0F28668	ThinkServer 3.5" 4TB 7.2K Enterprise SATA 6Gbps Hard Drive for RS Series			*					
0C19501	ThinkServer 3.5" 500GB 7.2K Enterprise SATA 6Gbps Hard Drive				*	*	*		
0C19502	ThinkServer 3.5" 1TB 7.2K Enterprise SATA 6Gbps Hard Drive				*	*	*		
0C19503	ThinkServer 3.5" 2TB 7.2K Enterprise SATA 6Gbps Hard Drive				*	*	*		
0C19504	ThinkServer 3.5" 3TB 7.2K Enterprise SATA 6Gbps Hard Drive				*	*	*		
0C19505	ThinkServer 3.5" 4TB 7.2K Enterprise SATA 6Gbps Hard Drive				*	*	*		
0C19514	ThinkServer 3.5" HDD to 5.25" Tray Convertor Kit						*		
0C19529	ThinkServer 3.5" HDD to 5.25" Tray Convertor with Slim ODD Kit						*		
0A89473	ThinkServer3.5" 500GB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive	*	*		*	*			
0A89474	ThinkServer 3.5" 1TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive	*	*		*	*			
0A89475	ThinkServer 3.5" 2TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive	*	*		*	*			
0A89477	ThinkServer 3.5" 3TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive	*	*		*	*			
0C19520	ThinkServer 3.5" 4TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive	*	*		*	*			
0C19530	ThinkServer 3.5" 1TB 7.2K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
0C19531	ThinkServer 3.5" 2TB 7.2K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
0C19532	ThinkServer 3.5" 3TB 7.2K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
67Y2616	ThinkServer 3.5" 300GB 15K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
4XB0F28644	ThinkServer 3.5" 600GB 15K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
4XB0F28669	ThinkServer 3.5" 1TB 7.2K SAS 6Gbps Hard Drive for RS Series			*					
4XB0F28670	ThinkServer 3.5" 2TB 7.2K SAS 6Gbps Hard Drive for RS Series			*					

Part Number	Drive	RD540 /RD640	RD340 /RD440	RS140	TD340 /TD440	TS440	TS140	TD350	RD550 /RD650
4XB0F28671	ThinkServer 3.5" 3TB 7.2K SAS 6Gbps Hard Drive for RS Series			*					
4XB0F28708	Lenovo ThinkServer Gen 5 3.5" 1TB 7.2K Enterprise SATA 6Gbps Easy-swap Hard Drive							*	
4XB0F28709	Lenovo ThinkServer Gen 5 3.5" 2TB 7.2K Enterprise SATA 6Gbps Easy-swap Hard Drive							*	
4XB0F28710	Lenovo ThinkServer Gen 5 3.5" 3TB 7.2K Enterprise SATA 6Gbps Easy-swap Hard Drive							*	
4XB0F28711	Lenovo ThinkServer Gen 5 3.5" 4TB 7.2K Enterprise SATA 6Gbps Easy-swap Hard Drive							*	
4XB0F28712	Lenovo ThinkServer Gen 5 3.5" 1TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive							*	*
4XB0F28713	Lenovo ThinkServer Gen 5 3.5" 2TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive							*	*
4XB0F28714	Lenovo ThinkServer Gen 5 3.5" 3TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive							*	*
4XB0G45715	Lenovo ThinkServer Gen 5 3.5" 4TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive							*	*
4XB0G45716	Lenovo ThinkServer Gen 5 3.5" 1TB 7.2K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45717	Lenovo ThinkServer Gen 5 3.5" 2TB 7.2K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45718	Lenovo ThinkServer Gen 5 3.5" 3TB 7.2K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45719	Lenovo ThinkServer Gen 5 3.5" 4TB 7.2K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45733	Lenovo ThinkServer Gen 5 3.5" 200GB Enterprise Performance SAS 12Gbps Hot-swap Solid State Drive							*	*
4XB0G45734	Lenovo ThinkServer Gen 5 3.5" 400GB Enterprise Performance SAS 12Gbps Hot-swap Solid State Drive							*	*
4XB0G45735	Lenovo ThinkServer Gen 5 3.5" 800GB Enterprise Performance SAS 12Gbps Hot-swap Solid State Drive							*	*
4XB0G45742	Lenovo ThinkServer Gen 5 3.5" 120GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45743	Lenovo ThinkServer Gen 5 3.5" 240GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45744	Lenovo ThinkServer Gen 5 3.5" 300GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45745	Lenovo ThinkServer Gen 5 3.5" 480GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45746	Lenovo ThinkServer Gen 5 3.5" 600GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45747	Lenovo ThinkServer Gen 5 3.5" 800GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
2.5" Hard-disk drives									
4XB0F28633	ThinkServer 2.5" 500GB 7.2K Enterprise SATA 6Gbps Hard Drive						*		
4XB0F28634	ThinkServer 2.5" 1TB 7.2K Enterprise SATA 6Gbps Hard Drive						*		
0C19495	ThinkServer 2.5" 500GB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive	*	*		*	*			

Part Number	Drive	RD540 /RD640	RD340 /RD440	RS140	TD340 /TD440	TS440	TS140	TD350	RD550 /RD650
0C19496	ThinkServer 2.5" 1TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive	*	*		*	*			
67Y2619	ThinkServer 2.5" 300GB 10K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
4XB0G45751	ThinkServer 2.5" 146GB 15K SAS 6Gbps Hard Drive for RS-Series			*					
4XB0F28672	ThinkServer 2.5" 300GB 10K SAS 6Gbps Hard Drive for RS Series			*					
4XB0F28673	ThinkServer 2.5" 600GB 10K SAS 6Gbps Hard Drive for RS Series			*					
4XB0F28674	ThinkServer 2.5" 900GB 10K SAS 6Gbps Hard Drive for RS Series			*					
4XB0F28675	ThinkServer 2.5" 300GB 15K SAS 6Gbps Hard Drive for RS Series			*					
4XB0F28676	ThinkServer 2.5" 500GB 7.2K Enterprise SATA 6Gbps Hard Drive for RS Series			*					
4XB0F28677	ThinkServer 2.5" 1TB 7.2K Enterprise SATA 6Gbps Hard Drive for RS Series			*					
4XB0F28685	ThinkServer 3.5" 4TB 7.2K SAS 6Gbps Hard Drive for RS-Series			*					
67Y2621	ThinkServer 2.5" 600GB 10K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
0A89409	ThinkServer 2.5" 900GB 10K SAS 6Gbps Hot-swap Hard Drive	*	*		*	*			
0C19494	ThinkServer 2.5" 300GB 15K SAS 6Gbps Hot-swap Hard Drive	*	*			*			
4XB0G45720	Lenovo ThinkServer Gen 5 2.5" 500GB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive							*	*
4XB0G45721	Lenovo ThinkServer Gen 5 2.5" 1TB 7.2K Enterprise SATA 6Gbps Hot-swap Hard Drive							*	*
4XB0G45722	Lenovo ThinkServer Gen 5 2.5" 300GB 10K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45723	Lenovo ThinkServer Gen 5 2.5" 600GB 10K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45724	Lenovo ThinkServer Gen 5 2.5" 900GB 10K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45725	Lenovo ThinkServer Gen 5 2.5" 1.2TB 10K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45726	Lenovo ThinkServer Gen 5 2.5" 146GB 15K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45727	Lenovo ThinkServer Gen 5 2.5" 300GB 15K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45728	Lenovo ThinkServer Gen 5 2.5" 450GB 15K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
4XB0G45729	Lenovo ThinkServer Gen 5 2.5" 600GB 15K Enterprise SAS 6Gbps Hot-swap Hard Drive							*	*
2.5" Solid-state drives									
0A89420	ThinkServer 2.5" 100GB MLC SATA Solid State Drive	*	*		*				
0A89418	ThinkServer 2.5" 200GB MLC SATA Solid State Drive	*	*		*				
0A89419	ThinkServer 2.5" 400GB MLC SATA Solid State Drive	*	*		*				
0C19571	ThinkServer 2.5" 100GB MLC SATA Solid State Drive to 3.5" Kit	*	*		*				
0C19572	ThinkServer 2.5" 200GB MLC SATA Solid State Drive to 3.5" Kit	*	*		*				
0C19573	ThinkServer 2.5" 400GB MLC SATA Solid State Drive to 3.5" Kit	*	*		*				

Part Number	Drive	RD540 /RD640	RD340 /RD440	RS140	TD340 /TD440	TS440	TS140	TD350	RD550 /RD650
4XB0F28678	ThinkServer 2.5" 120GB Value Read-Optimized SATA 6Gbps Solid State Drive for RS Series			*					
4XB0F28679	ThinkServer 2.5" 240GB Value Read-Optimized SATA 6Gbps Solid State Drive for RS Series			*					
4XB0F28680	ThinkServer 2.5" 480GB Value Read-Optimized SATA 6Gbps Solid State Drive for RS Series			*					
4XB0F28619	ThinkServer 2.5" 120GB Value Read-Optimized SATA 6Gbps Solid State Drive						*		
4XB0F28620	ThinkServer 2.5" 240GB Value Read-Optimized SATA 6Gbps Solid State Drive						*		
4XB0F28621	ThinkServer 2.5" 480GB Value Read-Optimized SATA 6Gbps Solid State Drive						*		
4XB0F28615	ThinkServer 2.5" 120GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive	*	*			*			
4XB0F28616	ThinkServer 2.5" 240GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive	*	*			*			
4XB0F28617	ThinkServer 2.5" 480GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive	*	*			*			
4XB0F28618	ThinkServer 2.5" 600GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive	*	*		*				
4XB0F28622	ThinkServer 2.5" 120GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive with 3.5" Tray	*	*		*	*			
4XB0F28623	ThinkServer 2.5" 240GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive with 3.5" Tray	*	*		*	*			
4XB0F28624	ThinkServer 2.5" 480GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive with 3.5" Tray	*	*		*	*			
4XB0F28625	ThinkServer 2.5" 600GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive with 3.5" Tray	*			*				
4XB0F28626	ThinkServer 1.4TB Mainstream Performance PCIe 2.0 Workload Accelerator	*	*		*				
4XB0F28657	ThinkServer 1.6TB ioScale2 PCIe 2.0 Workload Accelerator by Fusion-io	*	*						
4XB0F28656	Lenovo ThinkServer M.2 120GB Value Read-Optimized SATA 6Gbps Solid State Drive							*	*
4XB0G45730	Lenovo ThinkServer Gen 5 2.5" 200GB Enterprise Performance SAS 12Gbps Hot-swap Solid State Drive							*	*
4XB0G45731	Lenovo ThinkServer Gen 5 2.5" 400GB Enterprise Performance SAS 12Gbps Hot-swap Solid State Drive							*	*
4XB0G45732	Lenovo ThinkServer Gen 5 2.5" 800GB Enterprise Performance SAS 12Gbps Hot-swap Solid State Drive							*	*
4XB0G45736	Lenovo ThinkServer Gen 5 2.5" 120GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45737	Lenovo ThinkServer Gen 5 2.5" 240GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45738	Lenovo ThinkServer Gen 5 2.5" 300GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45739	Lenovo ThinkServer Gen 5 2.5" 480GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45740	Lenovo ThinkServer Gen 5 2.5" 600GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*
4XB0G45741	Lenovo ThinkServer Gen 5 2.5" 800GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive							*	*

RAID

Keeping data online 24/7 and preventing data loss requires smart solutions. Ensure your critical data is protected and available without sacrificing on performance using ThinkServer RAID solutions. Lenovo offers a variety of ThinkServer software RAID upgrades and hardware RAID controllers from LSI® – the most widely deployed RAID data-protection architecture in the industry.

Our range of ThinkServer RAID controllers addresses virtually all direct-attached storage environments – SATA or SAS hard-disk drives or solid-state drives, server-based storage or external direct-attached JBOD and storage enclosures. Options such as write-back cache with battery backup on the ThinkServer RAID 700 controller take availability to the next level and provide additional peace of mind. CacheCade Pro 2.0/FastPath, an option on the ThinkServer RAID 710 controller, is designed to improve the performance of your existing ThinkServer drive volumes, by utilizing solid-state drive technology as a secondary tier of cache to maximize random read-and-write performance.

adapters are available for the TD350, RD550 and RD650 to provide advanced data protection and performance - enhancing features without taking up PCIe slots.

	ThinkServer RAID 300 Upgrade Key	ThinkServer RAID 500 Upgrade Key	ThinkServer RAID 500 Controller	ThinkServer RAID 700 Controller	ThinkServer RAID 710 Controller
Device Support	8 SATA, SAS, SSD	8 SATA, SAS, SSD	8 SATA, SAS, SSD	8 SATA, SAS, SSD	8 SATA, SAS, SSD
Data Transfer Rates	Up to 3Gbps	Up to 6Gbps	Up to 6Gbps	Up to 6Gbps	Up to 6Gbps
RAID Levels	5	5/50	0/1/10 JBOD	0/1/10 /5/50/6/60	0/1/10 /5/50/6/60
Online Capacity Expansion	–	–	Yes	Yes	Yes
RAID Level Migration	–	–	Yes	Yes	Yes
Global Hot Spare	–	–	Yes	Yes	Yes
Cache Memory	–	–	–	512MB	1GB
Cache Protection	–	–	–	Battery backup 67Y2647	ThinkServer CacheVault Data Protection Upgrade 0C19490
ThinkServer RAID FastPath ThinkServer RAID CacheCade Pro 2.0	–	–	–	–	Yes 0C19491 0C19492
Part Number	0A89422	0A89407	0A89464	0A89463	0C19489
Compatibility	TD340, RD440, RD340	TS440, TD340, RS140, RD440, RD340, RD640, RD540	TS440, TD340, RS140, RD440, RD340, RD640, RD540	TS440, TD340, RS140, RD440, RD340, RD640, RD540	TD340, RD440, RD340, RD640, RD540

	ThinkServer RAID 110i Upgrade Key	ThinkServer RAID 510i AnyRAID adapter	ThinkServer RAID 510i Upgrade Key	ThinkServer RAID 720i AnyRAID adapter	ThinkServer RAID 720ix AnyRAID adapter
Device Support	6 SATA, SSD	8 SATA, SAS, SSD	8 SATA, SAS, SSD	8 SATA, SAS, SSD	26 SATA, SAS, SSD, PCIe
Data Transfer Rate	Up to 6Gbps	Up to 6Gbps	Up to 6Gbps	Up to 12Gbps	Up to 12Gbps
RAID Levels	5	0/1/10 JBOD	5/50	0/1/10/5/ 50/6/60 JBOD[1]	0/1/10/5/ 50/6/60 JBOD
Online Capacity Expansion	–	Yes	–	Yes	Yes
RAID Level Migration	–	Yes	–	Yes	Yes
Global Hot Spare	–	Yes	–	Yes	Yes
Cache Protection	–	–	–	1 GB Read only 1/2/4 Read-Write Flash/Supercap protected cache	1 GB Read only 1/2/4 Read-Write Flash/Supercap protected cache
ThinkServer RAID FastPath ThinkServerRAID CacheCade Pro 2.0	–	–	–	Yes (included with protected cache modules)	Yes (included with protected cache modules)
Part Number					
Compatibility	TD350, RD550, RD650	TD350, RD550, RD650	TD350, RD550, RD650	TD350, RD550, RD650	TD350, RD550, RD650

[1] JBOD only available without Cache installed on ThinkServer RAID 720i

CONNECT YOUR SERVER

Ethernet adapters, converged network adapters (CNA) and host bus adapters (HBA) help you leverage the full bandwidth potential of your network and scale your I/O to meet your growing infrastructure needs. Lenovo is working with industry-leading technology partners such as Intel, QLogic® and Emulex® to deliver a wide array of robust, fast and reliable Ethernet, CNA and HBA adapter choices for ThinkServer. And remember, as with all ThinkServer-branded options, ThinkServer Ethernet CNAs and HBAs are tested and proven on both our tower and rack servers.

AnyFabric is a system-board-based network mezzanine card that provides the option to choose basic NIC connectivity or powerful multi-port converged network adapters or fibre channel HBAs. It is available in the RD550 and RD650. RD550 configurations support two AnyFabric cards for up to eight 10Gb Ethernet ports in a 1U server without using any of the three PCIe slots. If you include network adapters in the available slots, the RD550 can support up to 100Gb of network bandwidth in a single 1U server. There's even an option for four 10Gb Ethernet ports with two 16Gb Fibre Channel ports at the same time — without using any of the PCIe slots — an industry first

Ethernet

Choose among dual- and quad-port ThinkServer Ethernet adapters by Intel with speeds of up to 10Gbps. Enjoy the cost savings and convenience of cross-platform compatibility on many ThinkServer series.

	Lenovo ThinkServer 1Gbps Ethernet CT2 Server Adapter by Intel	Lenovo ThinkServer 1Gbps Ethernet I350-T2 Server Adapter by Intel	Lenovo ThinkServer 1Gbps Ethernet I350-T4 Server Adapter by Intel	Lenovo ThinkServer 10Gbps Ethernet X520-SR2 Server Adapter by Intel	Lenovo ThinkServer 10Gbps Ethernet X520-DA2 Server Adapter by Intel	Lenovo ThinkServer 10Gbps Ethernet X540-T2 Server Adapter by Intel	Lenovo ThinkServer 10Gbps Ethernet OCe14102-NX Server Adapter by Emulex
Speed	1Gbps	1Gbps	1Gbps	10Gbps	10Gbps	10Gbps	10Gbps
Ports	Single	Dual	Quad	Dual	Dual	Dual	Dual
Cable Medium	Copper	Copper	Copper	Fibre	Copper	Copper	Copper, SFP+
Bracket	LP/FH	LP/FH	LP/FH	LP/FH	LP/FH	LP/FH	LP
Interface	PCIe v1.1	PCIe v2.0	PCIe v2.0	PCIe v2.0	PCIe v2.0	PCIe v2.1	PCIe v3.0
Protocols	Ethernet	iSCSI, NFS	iSCSI, NFS	iSCSI, FCoE, NFS	iSCSI, FCoE, NFS	iSCSI, FCoE, NFS	Ethernet
Part Number Previous Gen	4XC0F28725	0C19506	0C19507	0C19487	0C19486	0C19497	4XC0F28724
Part Number Current Gen		4XC0F28730	4XC0F28731	4XC0F28733	4XC0F28734	4XC0F28732	4XC0F28736
Compatibility	TS140, TS440	TS140, TS440, TD340, RS140 RD340, RD440, RD540, RD640 TD350, RD550, RD650	TS140, TS440, TD340, RS140 RD340, RD440, RD540, RD640 TD350, RD550, RD650	TD340, RD340, RD440, RD540, RD640, TD350, RD550, RD650	TD340, RD340, RD440, RD540, RD640 TD350, RD550, RD650	TD340, RD340, RD440, RD540, RD640 TD350, RD550, RD650	TD340, RD340, RD440, RD540, RD640

ThinkServer 10Gbps Fibre Module Upgrade by Emulex available (4XC0F28716). Works with part number 4XC0F28724.
ThinkServer 10Gbps Fibre Module Upgrade by Intel available (0C19488). Works with part number 0C19486.

	Lenovo ThinkServer I350-T4 AnyFabric 1Gb 4 Port Base-T Ethernet Adapter by Intel	Lenovo ThinkServer X520-DA2 AnyFabric 10Gb 2 Port SFP + Ethernet Adapter by Intel	Lenovo ThinkServer X540-T2 AnyFabric 10Gb 2 Port Base-T Ethernet Adapter by Intel
Speed	1Gbps	10Gbps	10Gbps
Ports	Quad	Dual	Dual
Cable Medium	Copper	Copper	Copper
Interface	PCIe 2.1	PCIe 2.0	PCIe 2.1
Protocols	iSCSI, NFS	iSCSI, FCoE, NFS	iSCSI, FCoE, NFS
Part Number	4XC0F28740	4XC0F28742	4XC0F28741
Compatibility	RD550, RD650	RD550, RD650	RD550, RD650

CNA

The ThinkServer CNA supports concurrent TCP/IP, Fibre Channel over Ethernet (FCoE) and iSCSI traffic over a shared 10Gbps Ethernet link. This adapter showcases industry-leading LAN networking performance and full hardware offload for FCoE and iSCSI protocol processing.

	Lenovo ThinkServer OCe14102-UM Dual-port CNA by Emulex	Lenovo ThinkServer OCe14102-UX Dual-port CNA by Emulex	Lenovo ThinkServer OCm14102-UX-L AnyFabric 10Gb 2 Port SFP + Converged Network Adapter by Emulex	Lenovo ThinkServer OCm14104-UX-L AnyFabric 10Gb 4 Port SFP + Converged Network Adapter by Emulex	Lenovo ThinkServer QLE8242-CU-CK Dual-Port CNA by QLogic	Lenovo ThinkServer OCe14401-UX-L PCIe 40Gb 1 Port QSFP + Converged Network Adapter by Emulex
Speed	10Gbps	10Gbps	10Gbps	10Gbps	10Gbps	40Gbps
Ports	Dual	Dual	Dual	Quad	Dual	Single
Cable Medium	SFP + SR Optical	SFP + Copper	SFP + Copper	SFP + Copper	SFP + Copper	QSFP+
Bracket	FH (LP available)	FH (LP available)			LP	FH (LP available)
Interface	PCIe v3.0	PCIe v3.0	PCIe 3.0	PCIe 3.0	PCIe v2.0	PCIe v3.0
Protocols	TCP/IP, FCoE, iSCSI	TCP/IP, FCoE, iSCSI	TCP/IP, FCoE, iSCSI	TCP/IP, FCoE, iSCSI	TCP/IP, FCoE, iSCSI	TCP/IP, FCoE, iSCSI
Part Number	4XC0F28722	4XC0F28723	4XC0F28743	4XC0F28744	0C19483	4XC0F28738
Compati bility	TD340, RD340, RD440, RD540, RD640	TD340, RD340, RD440, RD540, RD640 TD350, RD550, RD650	RD550, RD650	RD550, RD650	TD340, RD340, RD440, RD540, RD640	TD350, RD550, RD650

HBAs

Available in single or dual channel, ThinkServer HBAs by QLogic and Emulex offer streamlined installation and management, scalability and virtualization support, making them ideal for enterprise environments. An integrated processor design minimizes onboard components to improve efficiency and maximizes performance. Advanced error-checking features ensure data integrity.

8Gbps Fibre Channel HBAs								
	Lenovo ThinkServer LPe15004B -M8-L PCIe 8Gb 4 Port Fibre Channel Adapter by Emulex	Lenovo ThinkServer LPe16000B Single-port 8Gb FC HBA by Emulex	Lenovo ThinkServer LPe1250 Single-port 8Gb FC HBA by Emulex	Lenovo ThinkServer QLE2560 Single-port 8Gb FC HBA by QLogic	Lenovo ThinkServer LPe16002B Dual-port 8Gb FC HBA by Emulex	Lenovo ThinkServer LPe12002 Dual-port 8Gb FC HBA by Emulex	Lenovo ThinkServer QLE2562 Dual-port 8Gb FC HBA by QLogic	Lenovo ThinkServer LPm15004-M8-L AnyFabric 8Gb 4 Port Fibre Channel Adapter by Emulex
Speed	8Gbps	8Gbps	8Gbps	8Gbps	8Gbps	8Gbps	8Gbps	8Gbps
Ports	Quad	Single	Single	Single	Dual	Dual	Dual	Quad
Cable Medium	SFP+	Fibre	Fibre	Fibre	Fibre	Fibre	Fibre	Fibre
Bracket	low profile MD2	LP	FH	LP	LP	LP	LP	
Interface	PCIe v3.0	PCIe v3.0	PCIe v2.0	PCIe v2.0	PCIe v3.0	PCIe v2.0	PCIe v2.0	PCIe 3.0
Protocols	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel
Part Number	4XB0F28682	4XB0F28652	0C19476	4XB0F28649	4XB0F28643	0C19478	0C19482	4XB0F28707
Compatibility	TD340	TD340, RD340, RD440, RD540, RD640	TD340, RD340, RD440, RD540, RD640	RD340, RD440, RD540, RD640	TD340, RD340, RD440, RD540, RD640 TD350, RD550, RD650	TD340, RD340, RD440, RD540, RD640 TD350, RD550, RD650	TD340, RD340, RD440, RD540, RD640 TD350, RD550, RD650	RD550, RD650

16Gbps Fibre Channel HBAs						
	Lenovo ThinkServer LPe16004B-M6-L PCIe 16Gb 4 Port Fibre Channel Adapter by Emulex	Lenovo ThinkServer QLE2670 Single-port 16Gb FC HBA by QLogic	Lenovo ThinkServer QLE2672 Dual-port 16Gb FC HBA by QLogic	Lenovo ThinkServer LPe16000B Single-port 16Gb FC HBA by Emulex	Lenovo ThinkServer LPe16002B Dual-port 16Gb FC HBA by Emulex	Lenovo ThinkServer LPm16002-M6-L AnyFabric 16Gb 2 Port Fibre Channel Adapter by Emulex
Speed	16Gbps	16Gbps	16Gbps	16Gbps	16Gbps	16Gbps
Ports	Quad	Single	Dual	Single	Dual	Dual
Cable Medium	SFP+	Fibre	Fibre	Fibre	Fibre	Fibre
Bracket	Full Height	LP	LP	LP	LP	
Interface	PCIe v3.0	PCIe v3.0	PCIe v2.0	PCIe v3.0	PCIe v2.0	PCIe 3.0
Protocols	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel
Part Number	4XB0F28681	4XB0F28654	4XB0F28651	4XB0F28653	4XB0F28650	4XB0F28706
Compatibility	TD340, RD640	TD340, RD340, RD440, RD540, RD640	RD340, RD440, RD540, RD640 TD350, RD550, RD650	TD340, RD340, RD440, RD540, RD640	TD340, RD340, RD440, RD540, RD640 TD350, RD550, RD650	RD550, RD650

SAS HBAs		
	Lenovo ThinkServer LSI9280-8e 6Gb SAS RAID HBA by LSI	Lenovo ThinkServer LSI9286CV-8e 6Gb SAS RAID HBA by LSI
Speed	6Gbps	6Gbps
Ports	8	8
Cable Medium	2 External	2 External
Bracket	LP	LP
Interface	PCIe v2.0	PCIe v2.0
Protocols	TCP/IP, FCoE, iSCSI	TCP/IP, FCoE, iSCSI
Part Number	4XB0F28645	4XB0F28646 Includes CacheVault
Compatibility	TS440, RD340, RD440, RD540, RD640	TS440, RD340, RD440, RD540, RD640 TD350, RD550, RD650

MANAGE WITH EASE

ThinkServer Management Module Premium

The ThinkServer Management Module Premium (TMMp) adds to the functionality of the ThinkServer Management Module (TMM) – which is standard on ThinkServer TD340 tower – giving you remote keyboard, video, mouse (KVM) access and remote media access to your server. This means you can easily manage your servers from another location.

Part Number	Module	TD340	RD340	RD440	RD540	RD640
67Y2624	ThinkServer Management Module Premium	*	*	*	*	*

ThinkServer System Manager

ThinkServer System Manager (TSM) is Lenovo's completely redesigned and integrated systems management technology available on the next generation ThinkServer systems. TSM operates independently of the server providing hardware-based out-of-band (OOB) remote access and management to ThinkServer systems regardless of the power state of the server or the condition of the operating system.

Part Number	Module	RD550	RD650	TD350
4XF0G45867	Lenovo ThinkServer System Manager Premium (TSM Premium)	*	*	*
4XF0G45868	Lenovo ThinkServer Gen 5 Trusted Platform Module v1.2 (TPM)	*	*	*
4XF0G45869	Lenovo ThinkServer Gen 5 Trusted Cryptographic Module (TCM)	*	*	*

ThinkServer Energy Manager

Lenovo ThinkServer Energy Manager enables you to analyze, optimize and automate server power consumption through a single management console. ThinkServer Energy Manager provides broader decision-making intelligence and the ability to monitor and manage server power at all tiers, from the data center, room or rack down to the component level.

Part Number	Module	RD550	RD650	TD350
4L40G87595	Lenovo ThinkServer Energy Manager License – Single Node	*	*	*
4L40G87596	Lenovo ThinkServer Energy Manager License – 5 Nodes	*	*	*
4L40G87597	Lenovo ThinkServer Energy Manager License – 50 Nodes	*	*	*
4L40E51621	Lenovo ThinkServer Energy Manager License – Single Node	*	*	*
4L40E51622	Lenovo ThinkServer Energy Manager License – 5 Nodes	*	*	*
4L40E51623	Lenovo ThinkServer Energy Manager License – 50 Nodes	*	*	*

UPGRADE YOUR POWER

Power Supplies

Adding a second power supply with Hot-swap capability is the smartest and most cost-effective investment you can make to keep your server up and running.

Part Number	Power Supply	TS440	TD340	RD340	RD440	RD540	RD640	TD350	RD650	RD550
67Y2625	ThinkServer 450W Hot-swap Redundant Power Supply	*								
4X20E54689	ThinkServer 550W Gold Hot-swap Redundant Power Supply			*						
4X20E54691	ThinkServer 800W Gold Hot-swap Redundant Power Supply		*							
4X20E54690	ThinkServer 800W Gold Hot-swap Redundant Power Supply				*	*	*			
4X20F28575	Lenovo ThinkServer Gen 5 750W Platinum Hot-swap Power Supply							*	*	*
4X20F28576	Lenovo ThinkServer Gen 5 750W Titanium Hot-swap Power Supply							*	*	*
4X20F28577	Lenovo ThinkServer Gen 5 1100W Platinum Hot-swap Power Supply							*	*	*
4X20F28578	Lenovo ThinkServer Gen 5 1600W Platinum Hot-swap Power Supply									*
4X20F28579	Lenovo ThinkServer Gen 5 550W Platinum Hot-swap Power Supply							*	*	*

PROTECT, MANAGE AND SHARE YOUR CRITICAL DATA

The Lenovo family of network, direct-attached and RDX storage devices offer simple, powerful and affordable solutions to protect, manage and share your critical information. They include large storage capacities and the enterprise-class features that organizations need, such as support for Hot-swap drives, RAID, Active Directory, iSCSI, virtualization, snapshots and cloud storage options.

Network Attached Storage

Tower Devices

The LenovoEMC™ px2-300d, px4-400d and px6-300d network-attached devices pack ultra-fast storage and protection into a small, quiet chassis for office data protection and backup, with local and remote file sharing. Powered by enterprise-class LenovoEMC storage technology – and offering up to 24TB of capacity – the px tower devices are ideal for small- to medium-sized businesses and remote office/branch offices. Business users will appreciate the advanced data-protection features, such as multiple RAID levels with Hot-swap drives, user quotas, device-to-device data replication and certification for most virtualization environments. High-performance video surveillance/storage management solutions are also available with these tower devices to help protect small offices.

Part Number	Device
px2-300d	
70BA9004NA	LenovoEMC px2-300d Network Storage, 0TB Diskless
70BA9000NA	LenovoEMC px2-300d Network Storage Server-Class 2TB (2HD x 1TB)
70BA9001NA	LenovoEMC px2-300d Network Storage Server-Class 4TB (2HD x 2TB)
70BA9002NA	LenovoEMC px2-300d Network Storage Server-Class 6TB (2HD x 3TB)
70BA9003NA	LenovoEMC px2-300d Network Storage Server-Class 8TB (2HD x 4TB)
px4-400d	
70CM9000NA	LenovoEMC px4-400d Diskless
70CM9004NA	LenovoEMC px4-400d Server-Class 4TB (4HD x 1TB)
70CM9001NA	LenovoEMC px4-400d Server-Class 8TB (4HD x 2TB)
70CM9002NA	LenovoEMC px4-400d Server-Class 12TB (4HD x 3TB)
70CM9003NA	LenovoEMC px4-400d Server-Class 16TB (4HD x 4TB)
px6-300d	
70BG9000NA	LenovoEMC px6-300d Network Storage, 0TB Diskless
70BG9009NA	LenovoEMC px6-300d Network Storage Server-Class 6TB (6HD x 1TB)
70BG9011NA	LenovoEMC px6-300d Network Storage Server-Class 12TB (6HD x 2TB)
70BG9007NA	LenovoEMC px6-300d Network Storage Server-Class 18TB (6HD x 3TB)
70BG9012NA	LenovoEMC px6-300d Network Storage Server-Class 24TB (6HD x 4TB)

Rackmount Devices

The powerful LenovoEMC px4-400r, px4-300r, px12-400r and px12-450r network storage arrays offer the highest levels of performance and advanced data protection for small- to medium-sized businesses and distributed enterprises. These rackmount arrays are available in configurations up to 48TB in a single array and are ideal for production data stores, server virtualization, backup-to-disk target and video surveillance. Features include device-to-device data replication, snapshots, SSD cache pools RAID support, Windows® Active Directory support, Active Directory High Availability, Hybrid Authentication, remote access and management and user quotas.

Part Number	Device
px4-400r	
70CK9000WW	LenovoEMC px4-400r Diskless WW
70CK9005WW	LenovoEMC px4-400r Diskless ACR BU WW
70CK9004WW	LenovoEMC px4-400r Server-Class 4TB (4HD x 1TB) WW
70CC9000WW	LenovoEMC px4-400r Server-Class 4TB (4HD x 1TB) WWR
70CC9001WW	LenovoEMC px4-400r Server-Class 8TB (4HD x 2TB) WWR
70CK9001WW	LenovoEMC px4-400r Server-Class 8TB (4HD x 2TB) WW
70CC9002WW	LenovoEMC px4-400r Server-Class 12TB (4HD x 3TB) WWR
70CK9002WW	LenovoEMC px4-400r Server-Class 12TB (4HD x 3TB) WW
70CC9003WW	LenovoEMC px4-400r Server-Class 16TB (4HD x 4TB) WWR
70CK9003WW	LenovoEMC px4-400r Server-Class 16TB (4HD x 4TB) WW
px4-300r	
70BJ9003WW	LenovoEMC px4-300r Diskless WW
70BJ9007WW	LenovoEMC px4-300r Network Storage Array Server-Class 8TB (4HD x 2TB)
70BJ9004WW	LenovoEMC px4-300r Network Storage Array Server-Class 12TB (4HD x 3TB)
70BJ9005WW	LenovoEMC px4-300r Network Storage Array Server-Class 16TB (4HD x 4TB)
px12-400r	
70BN9004WW	LenovoEMC px12-400r Network Storage Array Server-Class 0TB DISKLESS
70BN9005WW	LenovoEMC px12-400r Network Storage Array Server-Class 4TB (4HD x 1TB)
70BN9000WW	LenovoEMC px12-400r Network Storage Array Server-Class 8TB (4HD x 2TB)
70BN9001WW	LenovoEMC px12-400r Network Storage Array Server-Class 12TB (4HD x 3TB)
70BN9003WW	LenovoEMC px12-400r Network Storage Array Server-Class 16TB (4HD x 4TB)
70BN9006WW	LenovoEMC px12-400r Network Storage Array Server-Class 24TB (12HD x 2TB)
70BN9007WW	LenovoEMC px12-400r Network Storage Array Server-Class 36TB (12HD x 3TB)
70BN9008WW	LenovoEMC px12-400r Network Storage Array Server-Class 48TB (12HD x 4TB)
px12-450r	
70BR9004WW	LenovoEMC px12-450r Network Storage Array Server-Class 0TB DISKLESS
70BR9001WW	LenovoEMC px12-450r Network Storage Array Server-Class 8TB (4HD x 2TB)
70BR9002WW	LenovoEMC px12-450r Network Storage Array Server-Class 12TB (4HD x 3TB)
70BR9003WW	LenovoEMC px12-450r Network Storage Array Server-Class 16TB (4HD x 4TB)
70BR9005WW	LenovoEMC px12-450r Network Storage Array Server-Class 24TB (12HD x 2TB)
70BR9006WW	LenovoEMC px12-450r Network Storage Array Server-Class 36TB (12HD x 3TB)
70BR9007WW	LenovoEMC px12-450r Network Storage Array Server-Class 48TB (12HD x 4TB)

Direct-Attached Storage

Combining expansive direct-storage capacity and innovative modularity, the ThinkServer SA120* provides an innovative tiered storage solution for data center deployments, distributed enterprises or small businesses. Its dual I/O controllers couple the high-speed, low-latency performance of solid-state drives with cost-effective, large-capacity SAS – for a budget-friendly storage solution with outstanding performance. The SA120 provides plenty of room for growth. You have the capability to add up to 12 x 3.5" SAS hard-disk drives on the front panel, up to 4 x 2.5" SATA solid-state drives on the rear panel and can cascade up to eight SA120 enclosures with HBA support. With a standard 3-year warranty and tool-less features, the SA120 provides peace of mind at an impressive value.

Part Number	Option
Hard-disk Drives	
0C19530	ThinkServer 3.5" 1TB 7.2K SAS 6Gbps Hot-swap Hard Drive
0C19531	ThinkServer 3.5" 2TB 7.2K SAS 6Gbps Hot-swap Hard Drive
0C19532	ThinkServer 3.5" 3TB 7.2K SAS 6Gbps Hot-swap Hard Drive
4XB0F28635	ThinkServer 3.5" 4TB 7.2K SAS 6Gbps Hot-swap Hard Drive
Solid-state Drives	
4XB0F28615	ThinkServer 2.5" 120GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28616	ThinkServer 2.5" 240GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28640	ThinkServer 2.5" 300GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28617	ThinkServer 2.5" 480GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28641	ThinkServer 2.5" 800GB Value Read-Optimized SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28636	ThinkServer 2.5" 100GB Mainstream Multipurpose SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28637	ThinkServer 2.5" 200GB Mainstream Multipurpose SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28638	ThinkServer 2.5" 400GB Mainstream Multipurpose SATA 6Gbps Hot-swap Solid State Drive by Intel
4XB0F28639	ThinkServer 2.5" 800GB Mainstream Multipurpose SATA 6Gbps Hot-swap Solid State Drive by Intel
Cage	
4XF0F28766	ThinkServer 2.5" SATA SSD Cage with SATA Interposer
Cables	
4X90F31494	ThinkServer 0.5 meters 26 Pin (SFF-8088 to SFF-8088) External miniSAS cable
4X90F31495	ThinkServer 1 meter 26 Pin (SFF-8088 to SFF-8088) External miniSAS cable
4X90F31496	ThinkServer 2 meters 26 Pin (SFF-8088 to SFF-8088) External miniSAS cable
4X90F31497	ThinkServer 4 meters 26 Pin (SFF-8088 to SFF-8088) External miniSAS cable
4X90F31498	ThinkServer 6 meters 26 Pin (SFF-8088 to SFF-8088) External miniSAS cable
I/O Controller	
4XF0F28765	ThinkServer Storage Array 6Gbps I/O Module
Power Supply	
4X20E54689	ThinkServer 550W Gold Hot-Swap Redundant Power Supply

* Not available in all countries

RDX Storage

RDX technology is a popular way for businesses to protect their ever-expanding amount of digital data. Due to high storage capacities, small footprint and low power and cooling requirements, RDX can be a very economical form of long-term data storage.

Part Number	Part Number	TD340	TS440	TS140
4XF0F28769	ThinkServer Internal USB RDX Tape Drive	*	*	*
4XB0F28659	ThinkServer 1.5TB 3Gbps RDX Cartridge	*	*	*
4XB0F28660	ThinkServer 1TB 3Gbps RDX Cartridge	*	*	*

For a complete list of options and accessories, visit www.lenovoquickpick.com
To learn more about Lenovo ThinkServer, visit www.lenovo.com/thinkserver

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